

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS & AMENDMENTS

Claims 1-25 were pending in this application when last examined.

Claims 1-5, 9-17 and 21-24 were examined on the merits, and claims 1-5, 9-12, 17, 23 and 24 stand rejected.

Claims 6-8, 18-20 and 25 were withdrawn as non-elected subject matter.

In item 5 on page 1 and in the middle of page 8 of the Office Action, it was indicated that claims 13-16, 21 and 22 are free of the art and allowed.

Claims 1 and 13 have been amended to clarify that the nucleotide sequence of the claims is the SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid encoded by SEQ ID NO: 1, Tyr at amino acid residue 22 to Phe, Gln at amino acid residue 26 to Asn, and Arg at amino acid residue 165 to Lys. Support for this change can be found in the disclosure, for example, at page 7, lines 15-26 and original claims 1, 13 and 18.

Claims 5, 11, 12, 17, 23 and 24 have been amended to recite "an isolated cell" as suggested by the Examiner. Support can be found in the claims as filed.

Claims 4, 5, 9-12, 17, 23 and 24 have been amended to recite "comprising" instead of "carrying" or "was introduced" to better conform with U.S. practice and to be consistent with the remainder of the claims. Support can be found in the claims as filed.

Therefore, no new matter has been added by this amendment.

II. INDEFINITENESS REJECTION

In item 6 on pages 2-3 of the Office Action, claims 1-5 and 9-12 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite on the basis that claim 1 and its dependents are drawn to a genetically engineered cDNA molecule, but the claim recites amino acid substitutions.

This rejection is respectfully traversed as applied to the amended claims.

It is well settled that the test for indefiniteness is whether those skilled in the art would understand what is claimed when the claim is read in light of the specification. See M.P.E.P. § 2173.02.

As noted above, the claims have been amended to clarify that the nucleotide sequence of the claims is SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid encoded by SEQ ID NO: 1, Tyr at amino acid residue 22 to Phe, Gln at amino acid residue 26 to Asn, and Arg at amino acid residue 165 to Lys.

The specification at page 7, lines 15-26, further clarifies the codons in the nucleotide sequence which are changed to effect the claimed changes in the amino acid sequence encoded by SEQ ID NO: 1.

Based on this disclosure and the Sequence Listing of record, it is respectfully submitted that one of skill in the art could clearly understand the metes and bounds of the claimed invention by ascertaining which nucleotides are substituted to effect the changes in the amino acid sequence.

Therefore, the indefiniteness rejection of claims 1-5 and 9-12 under 35 U.S.C. § 112, second paragraph, is untenable and should be withdrawn.

III. ENABLEMENT REJECTION

In item 7 on pages 3-8 of the Action, claims 5, 11-12, 17 and 23-24 were rejected under 35 U.S.C. § 112, first paragraph, on the basis that specification lacks enablement for how to make and use the claimed invention on the basis that the claimed cell containing the recombinant

vector encompasses transgenic animals. It was further indicated that the transgenic animal art is unpredictable and the specification lacks enablement for such.

This rejection is respectfully traversed as applied to the amended claims.

The amended claims clarify that the invention is drawn to "an isolated cell", and not transgenic animals. Thus, the claims are no longer drawn to a transgenic animal.

The specification clearly discloses routine techniques for making and using an isolated cell comprising the polynucleotide of SEQ ID NO: 1. See for instance, the working example in Example 2 on page 16.

In view of this amendment, the enablement rejection under 35 U.S.C. § 112, first paragraph, is untenable and should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below

Respectfully submitted,

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